

# Non-line-of-sight :: 900 MHz

The AW-D900 and AW-H900 replace costly cables and trenching with a non-line-of-sight, wireless network camera housing that enables remote network cameras. AvaLAN's products offer the ideal combination of price, penetrating range, data rate, security, interference avoidance, Quality of Service, and ease-of-use.



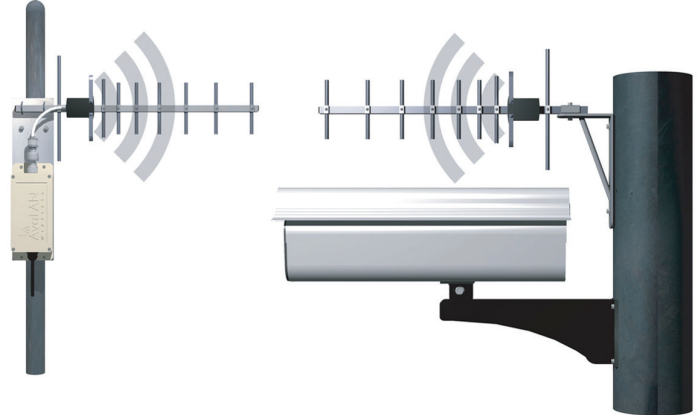
Shown with optional  
AW10 antennae  
purchased separately

## AW-D900 Kit

Integrated 900 MHz wireless dome housing for PTZ network cameras. Kit includes:

- (1) Videolarm (FDW75C2N) outdoor dome housing with heater/blower
- (1) AW900x outdoor radio
- (2) 120 VAC to 24 VAC/40 Va transformers
- (2) AW2 2.5 dBi omni-directional antennae
- (1) 120 VAC to 12 VDC power adapter
- (1) Power over Ethernet injector

Or upgrade to optional AW10 antennae



Shown with optional  
AW11 antennae  
purchased separately

## AW-H900 Kit

Integrated 900 MHz wireless housing for fixed network cameras. Kit includes:

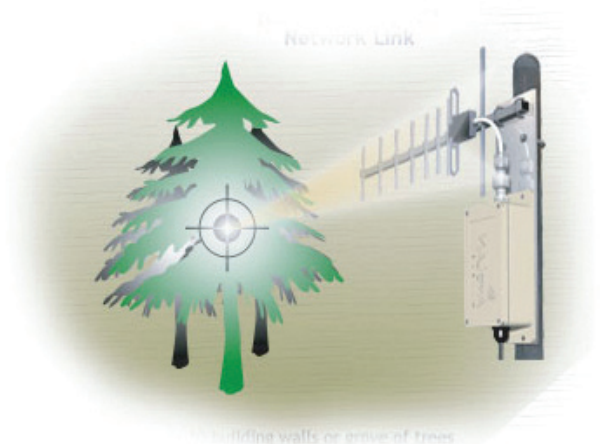
- (1) Videolarm (ACH313) outdoor housing with heater/blower
- (1) AW900x outdoor radio
- (1) 120 VAC to 24 VAC/40 Va transformer
- (2) AW2 2.5dBi omni-directional antennae
- (1) 120 VAC to 12 VDC power adapter
- (1) Power over Ethernet injector

Or upgrade to optional AW11 antennae

## Features

- High RF output power and exceptional receive sensitivity provide ultra-long-range wireless IP digital video delivery up to 40 miles line-of-sight or 10 walls/grove of trees for non-line-of-sight applications
- Does not interfere with Wi-Fi networks
- 128 bit encrypted with dynamic private keys
- Highest Quality of Service (QoS) available — synchronous point-to-point protocol enables IP video applications that require low data latency and jitter
- Simple plug and play — pre-configured as matched pairs with no user programming required
- 12 non-overlapping channels with frequency agility to avoid interference
- Operates in the 902-928 MHz band and does not require a license to operate or install in the USA or Canada

For a list of network cameras supported, please visit:  
<http://www.avalanwireless.com/NetworkCameras.htm>



## System diagram

### Non-line-of-sight range

With AW2:

- 600 ft. / 2 trees

With AW10 or AW11:

- 1,200 ft. / 3 trees

With AW15:

- 1,500 ft. / 3 trees



## Technical specifications

CHARACTERISTIC	SPECIFICATION / DESCRIPTION
RF transmission rate	1.536 Mb/s
Ethernet throughput	935 Kb/s
Output power	+21 dBm (4 Watts EIRP used with 15 dBi antennae)
Receive sensitivity	-97 dBm at 10e-4 BER (-112 dBm with 15 dBi antennae)
Latency	< 2 ms — assuming a dedicated wireless link to client device
Jitter	±0.5 ms — depending on packet size, interference, and SNR
Voltage Range	AW-900x: 9-48 VDC      AW-D900 and AW-H900: 24 VAC
Power Consumption	AW-900x: TX 1.3 W and RX 0.6 W over 9-48 VDC input voltage AW-D900 and AW-H900: 55 W (including 20 W heater) maximum
Radio channels	12 non-overlapping
Automatic frequency select	Yes — radio channel automatically selected and adaptively optimized
Manual frequency mode	Yes
Status LEDs	Power, Ethernet Link, RF RX, RF TX, 4/Channel, and 6/Link Quality
Error correction technique	Sub-block error detection and retransmission
Adjacent-band rejection	SAW receiver filter attenuates cellular and pager interference
Temperature range	AW-900x: -40° C to 70° C AW-D900 and AW-H900: -30° C to 50° C (depends on temperature range of camera) Heater turns on at 10° C and off at 27° C Blower turns on at 45° C and off at 27° C
Power over Ethernet	Use with 9 VDC to 48 VDC POE systems with lines 4/5 positive, 7/8 ground Includes injectors/power supplies

## Ordering information

PART NUMBER	DESCRIPTION
AW-D900	Integrated 900 MHz wireless dome housing kit for PTZ IP cameras
AW-H900	Integrated 900 MHz wireless housing kit for fixed IP cameras

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